

AUGUST 1949

SEP 12 1949

VOL. 56 NO. 8

MEDICAL LIBRARY

CLINICAL MEDICINE

Original Articles

	Page
Menopausal Uterine Bleeding (Graduate Course Symposium).....	123
Mechanical Factors in the Pathology and Physiology of Poliomyelitis.....	127
Clinicopathologic Conference (20).....	129

Problems in Practice

(Consultation Service)

Treatment of Chronic Undulant Fever.....	130
Helping the Patient with Apoplexy.....	131
Neostigmine for Tachycardia.....	131
THUMBNAIL THERAPEUTICS.....	132
DIAGNOSTIC POINTERS.....	133

University of Michigan
General Lib.
Ann Arbor, Mich.
Nov. 1949

By keeping the incompatibles apart,



YOU CONTROL THE STABILITY

New convenience and flexibility in B complex parenteral therapy. Bejectal contains all five major vitamin B complex factors in a sterile solution. Chart shows how you can control stability for complete or partial use as needed. Bejectal is supplied in 10-cc. combination packages through prescription pharmacies.

ABBOTT LABORATORIES • NORTH CHICAGO, ILLINOIS

SPECIFY

Bejectal®

Abbott's Injectable B Complex Vitamins

AT ROOM TEMPERATURE

STABLE—Indefinitely

UNOPENED



Bejectal remains stable indefinitely. When mixed the solution contains:

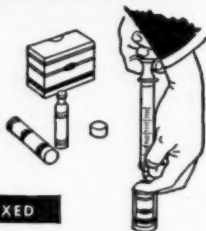
Per Vial (10 cc.)

Thiamine Hydrochloride.... 100 mg.
Riboflavin..... 20 mg.
Nicotinamide..... 750 mg.
Pyridoxine Hydrochloride .. 50 mg.
Calcium Pantothenate..... 50 mg.
In Water for Injection U.S.P.

Benzyl Alcohol, 0.9%, is added as a preservative since the mixed solution is for multiple doses.

STABLE—Up to two months

MIXED



This is the best way to prepare Bejectal when you expect to use the entire 10 cc. within 2 months. Simply withdraw 4 cc. of the contents from the small vial with a sterile syringe and transfer to the large vial. Shake and Bejectal is ready for instant use.

STABLE—Indefinitely

UNMIXED



When you expect 10 cc. to last longer than 2 months, this is the best way to use Bejectal. For example, whenever you want to inject a 1 cc. dose, simply withdraw 0.4 cc. from the small vial and 0.6 cc. from the large vial. Unused portion remains stable until needed.



Original Articles

Menopausal Uterine Bleeding

(A GRADUATE COURSE SYMPOSIUM)

Uterine bleeding during the menopause is a common and often serious clinical problem. When a physician recently wrote to *Clinical Medicine* with this problem: "What treatment should be given a woman 49 years of age who has occasional slight uterine bleeding over a 2 year period? Two curettages have not shown any malignant change, there has been no lesion of the cervix on repeated examinations and the body of the uterus has not enlarged. M.D., Ohio," a number of gynecologists and endocrinologists were consulted. Their answers follow:

Discussion

My answer to your question would be almost exactly as the one given in quotation marks under answer ("Gynecologists feel that bleeding disorders of the menopause, while endocrine in origin, are not to be treated by endocrine therapy. Experience indicates that hormonal therapy in this age group is hazardous. These patients should be treated by irradiation or surgery.")

I would add that endocrine therapy is seldom successful in this age group.

If the patient declines irradiation or surgery she could possibly be followed by Papanicolaou smears every three months if the technic were available and if she continues to have slight bleeding.—ARTHUR B. HUNT, Mayo Clinic, Rochester, Minn. Head of a section on Obstetrics and Gynecology.

Discussion

In the case described a moderate dose of radium would be ideal, e.g. 600 to 1200 mg. hour. Hysterectomy might be employed if an alternative to radium is desired. Never would I resort to endocrine therapy in a patient of 49 with conditions as described.—LEWIS SCHEFFEY, Jefferson Medical College, Philadelphia. Professor of Obstetrics and Gynecology.

Discussion

Malignancy having been ruled out, Progesterole or A.P.L. hormone should be given a fair trial before resorting to surgery. If after age 50 the patient is not relieved I would suggest a total hysterectomy.—G. P. CLELAND, M.D., Oregon City, Oregon.

Discussion

The attitude of the gynecologist who feels that "bleeding disorders of the menopause while endocrine in origin are not to be treated by endocrine therapy" carries with it the condemnation it fully deserves. If a disease is endocrine in origin, as admittedly it is, the judgment of how to treat it should be left to the endocrinologist, for it exceeds the competence and experience of the gynecologist.

Such patients are entitled to a thorough gynecologic checkup including a D & C to eliminate the presence of a gynecological disorder which, if present, should be treated by a gynecologist. If the findings are negative, it is up to the endocrinologist to decide which of the several promising therapeutic approaches he should select. There are four ways of treating the condition:

1. *Androgens*: Testosterone Propionate in 25 mg. doses, three times a week up to a total of not more than 250 mg. is usually adequate and safe to use. Sometimes a second course of treatment may be necessary.

Contraindications: Hypertrichosis or masculine habitus. Obesity usually becomes worse under androgen therapy.

2. *Estrogen Therapy*: As a styptic, estrogen is unsurpassed in high dosage. Continued over a period of two months followed by oral progesterone therapy for ten days before withdrawal usually leads to a normal period without repeated bleeding. Such treatment may be repeated once or twice.

Contraindications: Fibroids; mastodynia.

3. *Prolactin*: Two Hundred U. daily for one week followed by a few more injections every other day. This treatment may be repeated several times.

Contraindications: None.

4. *Gonadotropic Therapy*: Injections of an unfractionated anterior pituitary extract (Polyansin) combined with 500 U. APL, intramuscularly every other day until the next period. Following

the onset of bleeding, the amount of APL is reduced to 100 U. and the injections are given twice a week for the next two weeks; thereafter, until the following period, the original dosage is used, three times a week. The whole procedure is repeated for another month.

Contraindications: Symptoms of menopause.—MAX A. GOLDZIEHER, M.D., 104 East 40 Street, New York, N.Y.

Discussion

Such patients, as indicated by the question, should be individualized as to therapy. It is my opinion that most postmenopausal bleeding is pathologic in origin and the safety of surgery makes me favor removal of the uterus and ovaries. No cystological or histological study of the endometrium or cervix can eliminate ovarian neoplasm or future cancer of the uterus or ovaries.—JOHN H. DUGGER, Jefferson Medical College Hospital, Philadelphia, Pa.

Discussion

This particular woman who is bleeding at the age of forty-nine and whose two curettages have been negative, I should be inclined to do one of two things—either do nothing and curette her again if necessary, or else operate upon her and remove the uterus and the cervix. The reason I say this is because one can miss cancer on curettage just as one can miss it with a vaginal smear, and certainly vaginal smears ought to be done on this patient. If radium is given to such a patient or if the lesion is treated in any way to stop the bleeding without removing the uterus, then you never know whether or not any tumor is starting up again. I believe she should be left alone, should be curetted if necessary and if you cannot stop it this way, then I think she should be operated upon and have the uterus and the cervix removed.

I do not believe in the use of endocrine treatment in this sort of condition nor do I believe in the use of radium or x-ray treatment either. This sort of

thing is a serious matter and it is quite true that the instance of cancer of the cervix and cancer of the endometrium is as great, if not greater, than any morbidity or mortality from removal of the uterus and the cervix in the hands of those who are doing numbers of them.—JOE VINCENT MEIGS, Vincent Memorial Hospital, Fruit Street, Boston.

Discussion

In a woman of 49 years of age, who obviously has bleeding of the functional type, it would be irrational to subject her to the uncertainties and annoyance of organotherapy. The question of further reproduction is not important at this age, and the woman's only desire is to get well and to stay well. Irradiation is the simplest, safest and most sensible plan. Hysterectomy is not necessary, although entirely justifiable if there is some other indication for laparotomy, such as a ventral hernia or a diseased appendix that has been causing troublesome symptoms.—EMIL NOVAK, Johns Hopkins Medical School, Baltimore, Md.

Discussion

I usually favor surgical treatment. In this case, as in all such cases, conservative treatment with estrogens would be effective and could be carried out for one year, provided (a) no cystic mastitis (b) no family history of breast or uterine cancer, and (c) no constant fear of cancer in the patient. The last is important because conservative treatment in any form may upset the mind, the hypothalamus, the pituitary, and cause bleeding.—EDWIN ROBERTSON KING, Kingston General Hospital, Kingston, Ontario, Canada.

Discussion

The most common cause of irregular bleeding during the menopause is estrogenic therapy. Any woman who bleeds irregularly without therapy during the age of the menopause should be examined with great care and every effort made to determine whether or not

a benign or malignant tumor of the uterus is present. Blood dyscrasias should be ruled out.

A curettage should be performed and the material obtained carefully examined. If no evidence of malignancy can be obtained and the uterus is freely movable and of normal size, there are four glandular preparations that may be of some therapeutic value:

1. Desiccated thyroid—This is of value particularly when the basal metabolism is low.
2. Estrogenic therapy—This may inhibit bleeding when it occurs but when treatment is stopped, withdrawal bleeding is usually observed.
3. Androgen therapy—This appears to be of definite value in reducing the amount of bleeding from the uterus but possesses the disadvantage that it causes masculinization, sometimes in very small doses.
4. Chorionic gonadotropin—The value of this material is doubtful. It occasionally stops functional uterine bleeding in the beginning.

If bleeding continues in spite of treatment, the uterus should probably be removed even though no evidence of malignancy can be found on careful examination. Sometimes small fibroids which are difficult to detect give rise to abnormal bleeding.—W. O. THOMPSON, M. D., Chicago, Ill.

Discussion

In my opinion a woman of 49 years of age who has had occasional slight bleeding should not receive estrogenic therapy despite the fact that two curettages have not shown any malignant changes. I am of this belief not because I feel that estrogens are carcinogenic but rather because estrogens given to a patient with irregular bleeding may conceal malignancy. If this patient develops subsequent bleeding the physician might assume that this is due to the estrogens administered, otherwise it would be necessary for him to do an

other curettage on each occasion of irregular bleeding. Furthermore, patients who have irregular bleeding are more likely to bleed further and to bleed easily during the course of estrogen therapy. For this reason I am of the opinion that estrogen therapy given to patients with irregular bleeding in this age group is hazardous. As a rule the menopausal symptoms in such patients can be controlled with bromides or phenobarbital. If these do not suffice it is frequently helpful to add 10 mg. of methyl testosterone daily by mouth. The latter medication should be discontinued if any arrhenomimetic effects occur although this is not likely in this dosage. Irradiation or surgery are indicated if bleeding recurs. It must be recognized however that irradiation may make the menopausal symptoms more severe. If surgery is contemplated, an effort should be made to conserve some of the ovarian tissue in order to prevent a sudden exacerbation of the menopausal symptoms.

In my opinion, pituitary preparations are definitely contraindicated for this patient since at the menopause the gonadotrophins are already excessively high, and the ovary is incapable of responding to gonadotrophic stimulation.—A. E. RAKOFF, Jefferson Hosp., Philadelphia, Pa.

Discussion

The query concerns a woman with occasional slight bleeding. Evidently the blood loss is neither dangerous of itself nor particularly annoying to the patient. Since the usual searches for carcinoma have been made by pelvic examination and two curettages the question is whether radical treatment (X-ray therapy being often more difficult to endure than hysterectomy) is justified. I believe not. If the patient were mine I would consider non-gynecologic causes of bleeding such as hypertension, blood dyscrasias, nutritional deficiencies. If no cause were found I would have the patient report every two

months for a pelvic examination and a Papinicolau stained vaginal smear. I would not administer hormones in any form since I do not believe in treating a patient until the diagnosis is made. Probably the bleeding will stop in a few months. A vaginal smear showing evidence of carcinoma, or palpable changes in the pelvic organs would constitute an indication for laparotomy unless there was evidence of carcinoma of the cervix.—PENDLETON TOMPKINS, M.D., 450 Sutter Street, San Francisco, California.

Discussion

Under the circumstances of the question and in view of only occasional slight bleeding and negative histological examinations from the point of view of carcinoma, no treatment is necessary. However, further observations in the way of vaginal smears or additional curettages may be indicated for diagnostic purposes.

It should also be recalled that the question states that the specimens were negative from the point of view of malignancy. There are many benign conditions which also cause bleeding at this time. For instance, at the time of one curettage the diagnosis could have been hyperplasia of the endometrium, and at the time of the second curettage it might have been endometrial polypi, and so on.

I see no point in hormonal therapy unless you have the necessary information to be specific in this type of treatment. Under the circumstances, I would not advise even irradiation or hysterectomy if the bleeding was only occasional and slight, as stated in the question.—R. C. DOUGLAS, The New York Hospital, New York, N. Y.

Discussion

I am of the opinion that bleeding in a woman of 49 years of age with two negative curettages should be treated either by radium or surgery.—JAMES V. RICCI, M.D., 30 East 76th Street, New York, N.Y.

Mechanical Factors in the Pathology and Physiology of Poliomyelitis

By T. E. ROBINSON, M.D., *Salt Lake City, Utah*

1. In most acute infectious diseases, repair and clinical improvements are initiated almost immediately when the invasive stage is over as shown by normal temperature, normal pulse, and so on. This is not so in poliomyelitis—the major symptoms of the disease persist for weeks and months after the temperature is normal.

2. Fever is usually an evidence of the severity of the disease process. This is not true in poliomyelitis—many patients with slight or very little fever may have extensive and severe neuro-muscular involvement, especially in the lower limbs, while others may have high fevers with very slight neuro-muscular involvement.

3. Conversely one would think that with extensive paralysis the toxemia would be greatest but this is not an accurate corollary. Regardless of how extensive the paralysis—none of these people die unless the respiratory or cardiac centers are involved. This makes us postulate that poliomyelitis is not a very toxic disease from the standpoint of toxins or exotoxins and that here again the possibility of the mechanics of the pathologic process may weigh more heavily than the toxemia. My experience would indicate that only as the temperature control center is involved does fever become high and this fever will respond to treatment directed at relieving the mechanical, pathologic physiology.

4. The unpredictable, irregular, and variable recovery response can be adequately explained by the changes in physiologic dynamics induced by the disease.

I would call attention to the fact that

the lymphatics in the brain and spinal cord consist of the perivascular spaces of His which are spaces lined by a single layer of cells and are extremely delicate and compressible. These spaces follow the blood vessels out to the meninges and connect with the pia anachnoid spaces

One of the constant findings in poliomyelitis is the perivascular infiltration of lymphocytes described by Boyd as a "perivascular collar" of these cells. This collar follows the blood vessels out into the meninges and, in my judgment, produces almost a complete block to lymphatic drainage by either plugging or compressing the spaces of His.

I would also call attention to the fact that both veins and arteries exhibit this perivascular infiltration and with such the vein would be more compressed than the artery because of the difference in arterial and venous pressures and thus a mechanical process is present which contributes to passive hyperemia.

David Preswick Barr has pointed out that intravenous injections of hypotonic solutions in experimental animals causes marked increase in the amount of cerebrospinal fluid and an increase in its pressure from 130 to 323 mm. in normal dogs when Ringer's solution is used. He further observes that in infantile paralysis hypotonic solutions may cause some further oozing outside the dilated and oozing capillaries of the spinal cord and thus more fluid might be drawn into the diseased area with consequent damage from increased edema. Boyd observes that the cut surface of the cord bulges from the acute edema.

I would like to suggest that possibly

the reason the anterior horn cell region is more severely involved is because of the mechanics involved, the fact that the anterior spinal artery is much larger than the posterior spinal artery and the subsequent damage from passive congestion could be greatest in this area. Thus we have the potential of (1) lymphatic blockage, (2) passive hyperemia, and (3) edema in the surrounding tissues from oozing through the permeable capillaries — all of which can and probably do contribute to the pathology of the disease early in the invasive stage and all processes probably persist for weeks and months after the virus has been subdued to perpetuate the symptoms of pathology and thus explain all the variable and unpredictable responses in the late stages of the disease.

It is certain that the virus causes the original reaction and undoubtedly produces in some cases cytological changes which are irreversible, but most of the pathologic changes are reversible under proper treatment. I also postulate that much that pertains to poliomyelitis in pathology and treatment would apply almost equally to encephalitis because the same pathological and mechanical processes are operative.

Clinical Experience

I have treated more than 50 cases during a nine year period with only one case having major residuals and this case was extremely hard hit—a child 1½ years old who on the third day had a complete flaccid paralysis of all muscles of the left leg, about 90 percent paralysis of the right leg, bowel and bladder paralysis, and severe back spasm. Yet this child was up walking in less than two months with only the aid of a child's doll carriage to hold on to for support. She has major residuals in quadriceps and hamstrings of both legs and minor residuals in anterior tibial group on left leg. She walks without braces however. Space will not permit summarizing other case histories.

Treatment

Treatment consists largely of the following:

(1) Reduce fluid intake by mouth to point where specific gravity of morning urine specimen is at least 1.030. I limit adults to two and one-half 10 ounce glasses of liquids (all liquids) each 24 hours until pains and severe spasm relieve and then limit to 30 ounces for several weeks to several months until all spasm has gone and all reflexes have returned to normal.

(2) In severe cases I give 50cc. of 50 percent sucrose daily intravenously for 4 to 10 days—often one can demonstrate 10 to 15 percent release in leg spasm (by straight leg raising test) within 20 minutes after giving the sucrose. Much of this spasm will have reoccurred by the following day, but improvement is gradual and gratifying. All major pain will disappear within 2 to 7 days without other sedation.

(3) Early mobilization—get patient to exercise in bed early and out of bed to actively exercise as soon as pain disappears. Do not splint — exercise to prevent contractions.

(4) Give patient all solid food desired and necessary but measure fluids in those such as fruit, and so on.

(5) Do not let fever, even though high, deter your limitation of fluids because as the edema leaves the temperature control center the fever will disappear.

(6) Remember recovery is slow in poliomyelitis and all this treatment does is attempt to relieve the mechanical problems initiated by the disease processes and the treatment cannot succeed if not persisted in until maximum recovery is obtained, which in the average case will not be longer than 4 months. 1088 East 21st South Salt Lake City 5.

Clinicopathologic Conference* (20)

A TWO-YEAR old male infant was brought to the hospital in a semistuporous state. Two other siblings and both parents were well. The boy had been well on the evening before admission, but during the night he had cried out several times. In the morning, upon awakening, he had seemed unusually sleepy and had been put back to bed. He was too drowsy to eat breakfast and, when placed on the toilet, had slumped limply on the seat. It was then noted that his eyes crossed. He was returned to bed and could be aroused thereafter only with difficulty.

Past history revealed that the patient had weighed 4 pounds at birth, but, under the care of a pediatrician and with careful dietary management, he had gained weight and height rapidly. Growth and development had seemed normal in all respects. There had been no significant illnesses and no unusual behavior. In retrospect, it was realized that he had eaten poorly for several days prior to hospital entry and that several stools had been unformed on the day previous.

Examination revealed a flaccid, immobile infant, apparently unaware of his surroundings. Painful stimuli evoked a cry and withdrawal, but there was prompt lapse into apparent stupor. Temperature was normal. Skin was clear and hydration normal. Ears, nose and throat were normal, but there was a bilateral convergent strabismus and intermittent nystagmus. The pupils were moderate in size and reacted to light. The fundi were not remarkable. The heart and lungs were clear and the abdomen negative except for some moderate voluntary guarding. The neck was

limber, the plantar reflexes normal and Kernig's sign negative. No patellar or achilles tendon reflexes could be elicited. Cremasteric reflexes were active, but abdominal reflexes were absent. There was diminished sensitivity to pain. There were no generalized convulsions, but some twitching of muscle bundles in the extremities were seen.

Laboratory: Red blood cells were 4.16 million per cu. mm., hemoglobin 11.5 gm./100 cc, white blood-cells were 13,800 with 70 percent filamented neutrophils, 12 non-filamented neutrophils and 18 lymphocytes. A urine specimen could not be obtained. Lumbar puncture revealed clear fluid under increased pressure (greater than 600 mm. of water). The specimen contained no cells, 14 mg. per cent of protein, 743 mg. per cent of chloride as NaCl and 8 mg. per cent of sugar.

What is your diagnosis?

Diagnosis: Hypoglycemia, etiology not determined.

Course: When the spinal fluid sugar was found to be only 8 mg. percent, a blood sugar was determined and proved to be 25 mg. per cent. Reducing the intracranial pressure by spinal tap had made the infant more alert and he was readily prevailed upon to drink large quantities of sweetened orange juice. Within a short time he was playing in his crib. On the morning following entry he appeared well and was discharged during the second day. A follow-up report revealed that he had continued to be well.

(Editor's Note: The cause may have been an acute hypoglycemia due to poor dietary and over activity, but how do we know that the boy did not have a pancreatic or a multiglandular syndrome?)

* Case history from *Bull. Children's Hospital*, Denver, Colorado, 1, 5, 161-62, Jan. 1948.



Problems in Practice

(CONSULTATION SERVICE)

Treatment of Chronic Undulant Fever

Question:

What is an effective method of treatment of chronic undulant fever? The injection of large doses of vaccine seems to cause a fever that makes the patient miserable and does not help the majority of them.—M.D., Brooklyn, New York.

Answer:

Most men treating brucellosis or undulant fever are using small, frequently repeated doses of vaccine. Joseph Griggs of Claremont, California suggests the following principles (1) never begin vaccine therapy until all reactions to previous vaccine or cutaneous test has completely subsided. The treatment should begin with vaccine so diluted that there will be no general reaction and a very small local reaction. The injection should be given in the thigh, or deltoid muscles, and should not be repeated as long as there is any induration, redness, swelling, or tenderness from the previous dose. The injection should be given every two or three days and intervals between should never be more than 5 days because of the likelihood of increased reaction. When the initial dose gives only a small reaction, subsequent doses are doubled each time until larger reactions begin to appear. If reactions become progressively severe in spite of little or no increase of doses of vaccine, the injection should be stopped for 5 days or more, the treatment should then begin again with a much weaker solution of vaccine than

has ever before been used for that patient. The doses are increased more gradually. A different route, such as the intravenous or intradermal route will be necessary for some patients. In the case of young, vigorous patients, treatment requires several weeks, and the majority of all patients require more than a year. If the patient is not recovered clinically, after the gradual building up to large doses, one should first, desensitize again—even though the patient's tissues do not appear to be hypersensitive; (2) search for a focus of infection, or for several foci and give appropriate treatment with removal by surgery or short-wave diathermy or medication, check the diagnosis as a whole. Repeat the desensitizing, immunizing series of vaccine injections with vaccine of different strains of brucella, preferably from the area where the patient contacted the disease. Try larger doses and greater concentration of vaccine. Discontinue vaccine for an observation period of several months. Repeat the series using a different route, either intradermal or intravenous and increase the doses more gradually.

Patients should be warned that they will continue to excrete some of the natural undulations of the disease even when under treatment. They should be ordered to resume normal activity to the limit of their will power, short of exhaustion. Subtles and all other medication should be stopped. Most patients can resume normal adequate eating hab-

its. A few patients, until they are desensitized, may need to avoid milk and milk products, beef and pork which contain brucella substances to which they are allergic. Intelligent patients may be taught in a few weeks to administer the vaccine themselves, checking the condition once or twice a month. Gratifying improvement is usually noticed within 2 months from the beginning of treatment.

Commercial vaccines must be diluted with sterile isotonic saline solution.

Your Editor adds that many diagnosticians are unwilling to concede that most patients who seem to have chronic brucellosis actually do have. One clinician writes that he does not consider brucellosis unless a flat abdominal x-ray reveals an enlarged spleen. From a per-

sonal study of a series of cases, it has been shown that both acute and chronic undulant fever may occur without the spleen being enlarged, either to physical examination or x-ray.

In the course of brucellosis, such complications as pneumonia, pleurisy, and many other conditions may occur, which are diagnosed as organ diseases only, and the underlying brucellosis is overlooked.

Harris makes the suggestion that every time you withdraw blood for a Wassermann Test, additional blood be taken for an agglutination test for undulant fever. To this might be added Darley's idea that all patients who have been diagnosed as psychoneurotic should have a skin test for brucellosis.

Helping the Patient With Apoplexy

Question:

Can any real treatment be given for the patient with apoplexy? I realize that there is no therapy for cerebral thrombosis but wonder if newer neurosurgical methods might aid the patient with cerebral hemorrhage and later blood clot.—M.D., Joplin, Missouri.

Answer:

A number of neurosurgeons, beginning with Cushing, have operated upon patients with cerebral clots and helped a certain percentage. Recently, the injection of procaine solution into the cervical sympathetic chain on the same side, has been shown to increase the blood flow around the area of hemorrhage and de-

crease the edema in the same area.

Recently I. S. Wechsler of the Mount Sinai Hospital, New York City, has studied a number of such patients by x-ray visualization of the cerebral arteries, and the area of thrombosis or hemorrhage. With a definite diagnosis thus made, surgical exploration may be indicated and be of real value to the patient.

Practically, one might conclude that in relatively young patients who have no other serious physical disabilities one should recommend that a neurosurgeon study the patient, even though it means an ambulance trip and additional expense. Everyone must have his chance for life and health.

Neostigmine for Tachycardia

In the consultation section of *Clinical Medicine*, (Jan. 1949, p. 10) one of your correspondents wrote enthusiastically about the value of Neostigmine for tachycardia. Since he gave no references, I want to appraise you of the work by Dr. Woldman and myself done in this condition.

In sinus tachycardia, Neostigmine reduces the rate by slowing impulse formation at the sino-auricular node, through stimulation of the vagus, espe-

cially the right. In paroxysmal auricular and nodal tachycardias, it slows the heart rate by stimulating the vagus, especially the left, thus inducing incomplete heart blocks of varying degree. 1 mg. of neostigmine may be injected intramuscularly to prevent recurrences.

Neostigmine bromide tablets may be taken 3 times daily.—LOUIS FELNER, M.D., 1352 Carroll St., Brooklyn, 13, N. Y. Last ref. *Annals of Internal Med.*, Vol. 29, No. 1, July—1948.



Thumbnail Therapeutics

Treatment of the Asthmatic Youngster

The child who has frequent winter colds and asthmatic bronchitis associated with these infections may derive dramatic relief from a properly spaced course of radium therapy to the lymphoid tissue in the naso-pharynx. Even after a properly performed adenoidectomy, there is a marked tendency for such lymphoid tissue to regrow.

Cough, due to post-nasal drip is dramatically relieved.—L. N. GAY, M.D., in "The Diagnosis and Treatment of Bronchial Asthma" (Williams and Wilkins Co.) "The prognosis in an acutely ill asthmatic infant is always serious. If a simple remedy such as the inhalation of benzoin or an injection of adrenalin, does not relieve the symptoms, the child should be given oxygen. Hospitalization is preferable, as frequently the dehydration requires intravenous fluid. Even a small dose of morphine may be depressing enough to cause respiratory paralysis, and therefore must be avoided. Bronchoscopic examination may be indicated in young children since the withdrawal of the tenacious mucous from the larger bronchi may be the means of establishing less labored respiration.—L. N. GAY, M.D., in "The Diagnosis & Treatment of Bronchial Asthma" (Williams & Wilkins Co.)

Home Treatment for Apoplexy

Treatment for apoplexy should be begun at once: 1. Footboard or posterior leg splint to prevent foot drop, 2. Sand bags to prevent outward rotation of affected leg, 3. A pillow in axilla to prevent adduction of shoulder, 4. "Setting" (use) of quadriceps muscle to maintain muscle strength.—H. A. RUSK, M.D., in J.A.M.A., Jan. 1, 1949.

Treatment of Acute Nephritis

The child with acute nephritis and edema may be treated with intravenous 2 per cent magnesium sulphate or 50 per cent solution orally until diarrhea develops, sedation, salt-free diet, oxygen if necessary. C. T. HERBERT, M.D. in J. Missouri M.A., Dec. 1948.

Vitamin B and Liver Extract for the Aged

Many elderly patients flourish on vitamins, especially those of the B complex group. Many an elderly patient who neither has pernicious nor any other form of anemia, does well on weekly injections of liver extract. The replacement of hydrochloric acid, pepsin and even pancreatic extractives, may be beneficial.—ROGER I. LEE, M.D. in *Insurance Medicine*, May 1947.

(The author also suggests that hypothyroidism requiring thyroid extract is not uncommon. Benzedrine sulfate is useful in a wide range of symptoms including depression, narcolepsy, lack of nervous energy, but it does decrease bladder tone—Ed.)

High Protein Diet for Peptic Ulcer

A high protein intake is desirable in patients with peptic ulcer because the disease often leads to a protein deficiency because of loss of appetite, restricted diet, and chronic blood loss.—B. KENAMORE in *Gastroenterology*, Feb., 1948.

Preventing Striae of Pregnancy

The striae of pregnancy may be due to a low intake of vitamin C. Every pregnant patient should receive large amounts of fruit juices.—W. J. MCCORMICK, M. D. in *Med. Record*, Aug. 1948.

Diagnostic Pointers



Allergy and Asthma

It is a serious mistake to consider that all cases of bronchial asthma are manifestations of allergy. They produce difficult breathing by involving the mucosa and glandular structure with an abundance of tenacious purulent exudate which causes stenosis of the bronchial and alveolar spaces. Stenosis thus occurs and dyspnea is quite pronounced—even without exertion by the patient.

Extrinsic Asthma

Asthma may be caused by such extrinsic factors as inhalation of dust, pollen, danders from animals, or insects, cosmetics, molds, chemical fumes, gases liberated by hot air furnaces, or after eating small quantities of foods, or after taking drugs such as aspirin or sulfonamide. The patient may become asthmatic after a period of emotional strain or during pregnancy.

Intrinsic Asthma

Intrinsic factors include asthmatic bronchitis, developing as a complication of low grade chronic infection of the adenoids and tonsils, or unrecognized sinus infection, or the patient who has recovered from acute pneumonia, to produce a persistent cough that precipitated proxysmal asthmatic bronchitis or develops a sinusitis after an acute pneumonia in middle age. Asthmatic bronchitis of long standing, paroxysmal dyspnea, and definite cardiac insufficiency may be associated. Entirely unrelated conditions such as the obstructive type of goiter, carcinoma of the lung or larynx, or fungus infection of the lung may cause dyspnea. A patient, after 40, may develop acute paroxysmal asthma without any discoverable cause, or asthma may develop during menstruation or at time of menopause.—L.N. GAY, M.D., in "The Diagnosis and Treatment of Bronchial Asthma" (Williams and Wilkins Co.)

Persistent Cough Following Respiratory Infections

A patient who has a persistent or recurrent productive cough following bronchopneumonia, influenza and the like, and in whom tuberculosis, malignant tumor and other serious conditions can be ruled out, probably suffers from chronic pyogenic pulmonary infection. Sputum examination for tubercle bacilli and for other organisms should be done, plus lipiodol studies of the bronchi, if possible. Inhalation of penicillin vapor (aerosol) in daily doses of 200,000 to 400,000 units causes a spectacular improvement. Continuation of treatment with gradually decreasing doses for 2 to 6 months, may be required to arrest the infection and prevent early relapse.—WALTER FINKE, M.D., in *Amer. Pract.*, Mar. 1948.

Heartburn

Heartburn is frequently a manifestation of emotional tension. Functional esophageal disturbances caused by faulty eating habits and air swallowing (with consequent frequent belching) cause heartburn. Heartburn is apparently caused by abnormal neuromuscular activity at, or just above the cardiac sphincter of the stomach, with alterations in esophageal tone.—H. J. TUMEN, M.D., in *J.A.M.A.*, Jan. 29, 1949.

Ovarian Tumor and Menstrual Abnormalities

The occurrence of menstrual abnormalities, abnormal vaginal bleeding or menopausal bleeding and an ovarian tumor is an indication for immediate removal of the tumor, which may be an ovarian carcinoma.—*Iowa Cancer Bulletin*.



New Books

Any book reviewed in these columns will be procured for our readers if the order, addressed to **CLINICAL MEDICINE**, Waukegan, Ill., is accompanied by a check for the published price of the book.

Doctors of Infamy

By Alexander Mitscherlich, M.D., Head of German Medical Commission to U.S. Military Tribunal, Nuremberg. Henry Schuman, N.Y. 1949. \$3.00.

A documented story of what "physicians" did to helpless prisoners in the name of medical experiments. The fame of German medicine is indeed tarnished by this exposition of needless torture, by many German physicians. Science without humanity is a curse.

The Doctor Wears Three Faces

By Mary Bard. Lippincott Co. 1949. \$3.00

A physician's wife tells all, and I mean all—about living with, working with and enduring a doctor, viewed satirically and humorously. This book is a good present for a doctor or his wife.

Standard Radiographic Positions

By Nancy Davies, M.S.R. Senior Radiographer, Malvern General Hospital, Malvern, Eng. and Ursel Isenbarg, M.S.R., Radiographer, Royal Free Hospital, London. Williams and Wilkins Co. 1948.

A small but valuable text for the student physician and x-ray technician which demonstrates by text and sketches the various positions and what they permit to be visualized.

Illustrative Electrocardiography

By Julius Burstein, M.D., Chief, Cardiac Clinic, Morrisania Hospital, N.Y.C. and Nathan Bloom, M.D., Chief, Department of Electrocardiography, Medical College of Virginia, Richmond. D. Appleton-Century Co. 1948. \$6.00.

For the neophyte in electrocardiography, this volume presents the basic concepts necessary to understand the string technic, the meaning of each wave in the complex and of various normal changes in the tracings, the effect of various pathologic states on the electrocardiogram, and finally, some excellent x-rays illustrating typical appearances of various cardiac lesions.

Public Health in the World Today

Edited By James S. Simmons, M.D., Dean, Harvard School of Public Health. Harvard University Press. 1949. \$5.00.

The public health physician who reads this will settle back with a glow of being one of a new, rapidly advancing group who, and I quote, "are the most virile, unprejudiced and

selfless group of individuals providing health services." The physician in practice will no doubt be surprised to read that he is a member of a group that is "becoming not only complacent and self-satisfied but also worldly, calculating, and self-interested—commercial". This will give him something to cogitate on as he hurries around in his practice, takes his postgraduate studying, tries to pay for his new equipment and for his family's expenses, and so on. It is true that more physicians should have a grasp of public health and its implications in their daily practice. I have worked on both sides of the fence and have seen the deficiencies in both groups. Why not work together for the common good, instead of criticizing each other? Representatives of various organizations concerned with health, including the military services and the Public Health Service, present their problems and prospects briefly and often interestingly. —R. L. G.

Physical Medicine in General Practice

Edited by Arthur L. Watkins, M.D. Lippincott Company. 1948. \$5.00.

A very practical compendium on the use of physical agents in the treatment of conditions encountered by the general practitioner. The advice on care of sprains and fractures is especially appropriate.

Management of Common Gastro-Intestinal Diseases

Edited by Thomas A. Johnson, Graduate School of Medicine, University of Pennsylvania, Philadelphia. Lippincott. 1948. \$7.00.

A series of 16 articles on the recognition and management of ulcer, gastric cancer and other frequently found diseases of the digestive tract. The authors and their ideas are well known to those who keep up with the literature. To those who do not have time to do so, this volume encompasses much valuable information in small space.

The Child in Health and Disease

By C. G. Grulee, M.D., Rush Professor of Pediatrics, University of Illinois, Chicago, and R. C. Eley, M.D., Associate in Pediatrics, Harvard University, Boston. Williams and Wilkins Co. 1948. \$12.00.

A very complete textbook on the development, both physical and mental, of the infant and child, and of the diseases that may encompass him. Each section is written by an authority in his field. This may well become the Bible of pediatricians.